of our patients were noted to have crepitus most often of the edematous scrotum which was confirmed by interstitial gas on x-ray studies of the kidney, ureter and bladder.

Systemic diseases such as diabetes mellitus severe atherosclerotic disease often with neurologic deficits may be predisposing factors. Urinary extravasation and periurethral phlegmon may lead to the infection as well. In one of our cases there was a colorectal primary source of infection, with evidence in the literature suggesting an increase in morbidity due to the occult nature of the infection.

Both aerobic and anaerobic cultures were obtained yielding a microaerophilic Streptococcus associated with an aerobic Escherichia coli. These organisms were synergistic with mixed aerobic choliforms such as Bacteroides species, Fusobacterium and Peptostreptococcus. Chloramphenicol and high dose aqueous penicillin G is the preferred treatment.

With experience our surgical approach became more conservative for questionable areas of viability. Rather than the wide radical debridement advocated by Persky, efforts were directed in excising only obvious necrotic tissue and leaving edematous tissue that bled poorly for later demarcation. We found that adequate aeration and drainage would salvage needed tissue for later closure that provided a quite satisfactory cosmetic result.

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Surgical Treat for the Undescended Testis

TESTICULAR BIOPSY STUDIES of several hundred boys with unilateral undescended testis have shown that the scrotal testis begins a process of maturation after 1 or 2 years of age. The undescended testis lags behind its scrotal mate in this maturation process. These anatomic findings have led to the recommendation for orchiopexy at an early age. Many surgeons would now recommend that surgical therapy be done by the age of 2 years.

In addition to placing the testis in its optimum anatomic location for maturation, there may be some benefit in terms of subsequent malignant tumor formation. Among some 220 case reports of testicular tumors developing after orchiopexy, only six cases occurred in children treated by orchiopexy under the age of 10 years. This is suggestive but not proof that early orchiopexy may protect against some subsequent malignant degeneration.

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Pelvic Radiation Therapy for Localized Carcinoma of the Prostate

SINCE 1965 a total of 432 patients with localized prostate cancer have received intensive local radiation therapy at The Virginia Mason Medical Center, Seattle. A study group of 277 patients, treated from 1965 through 1975, included 221 with stage C cancer, 36 with stage B cancer and 10 with diffuse stage A disease.

Following careful pretreatment evaluation and treatment planning procedures, the patients received external beam radiation therapy to a level of 6,500 to 7,000 rad. Though initially using cobalt 60, current treatment techniques employ a 10 mv linear accelerator photon beam with an arrangement of opposing anterior and posterior and bilateral pelvic fields, supplemented with more localized bilateral arc rotation boost therapy. Particular attention is directed to gastrointestinal tract shielding.

The five-year survival of the stage C group was 57.7 percent, with no apparent survival influence related to use of estrogen therapy. The 25 patients with postprostatectomy residual or recurrent cancer were treated more cautiously, but tolerated the treatment well with eight of 12 eligible patients surviving five years.

Increasing acceptance of local intensive radiation therapy in the management of prostate cancer is supported by increasing the referral of patients with stage BII and C cancer. Our series of patients has tolerated treatment with acceptable morbidity and with greater maintenance of sexual potency.

Multiple reports attest to the apparent value of external radiation therapy in local management of prostate cancer. Therefore, until more effective methods of treatment are conclusively shown, there is justification to continue its use in: the management of locally advanced nonresectable

stage C cancer; selected cases of potentially aggressive stage A disease; patients with high grade diffuse and bilobular stage B cancer; and patients who have residual or recurrent cancer after radical prostatectomy or trials of estrogen therapy.

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Long-Term Indwelling Foley Decatheterization and Bladder Rehabilitation In Spinal Injury Patients

IN 40 MEN with spinal injuries whose mean age was 41.4 years (range 22 to 68), indwelling catheters had been in place for a mean period of 7.6 years (range 1 to 24) following spinal injury. There were 21 tetraplegics, 14 paraplegics and 5 with cauda equina lesions (all clinically complete lesions). All presented for urodynamic evaluation and possible removal of indwelling catheters. All patients had long-standing urinary tract infections. All tetraplegics and high paraplegics had varying degrees of autonomic dysreflexia. After hospital admission, intermittent catheterization was started on all patients; however, tetraplegic patients with previous history of autonomic dysreflexia were also given anticholinergics to reduce frequency of catheterization. Urinary tract infection was controlled with an appropriate antibiotic, and bladder irrigations with neosporin genitourinary irrigant solution. Cystomanometry, sphincter electromyography, urethral pressure profile and voiding cystourethrographic studies were done only after patients had been on intermittent catheterization for a minimum period of 48 hours but usually after seven days. There were 12 patients (30 percent) in whom vesicoureteral reflux was noted (possibly indwelling catheter had been left in due to reflux). Eight patients (20 percent) had been treated for bladder and renal stones on several occasions. In 18 patients simultaneous cystomanometry and periurethral striated electromyography showed detrusor-sphincter dyssynergia.

Indications for transurethral extended sphincterotomy in this group of patients included the following: (1) detrusor-sphincter dyssynergia, (2) vesicoureteral reflux, (3) inability to open bladder neck and posterior urethra on voiding cystourethrography. In 33 patients transurethral sphincterotomy was done. There were seven patients in whom transurethral sphincterotomy was repeated because high residual urine persisted. No surgical operations were done in seven patients; in three in this group it was recommended, but patients deferred surgical therapy. Follow-up (six months to four years) shows pronounced improvement in general well-being, no recurrence of bladder stones, amelioration of autonomic dysreflexia and notable improvement in vesicoureteral reflux. At the last follow-up, there were positive urine cultures in six patients (15 percent). All patients were receiving prophylactic medications, either trimethoprim/sulfamethoxazole (Septra) or methenamine mandelate (Mandelamine) and ascorbic acid.

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Conservative Treatment of Early Carcinoma of the Prostate: Comparison of Patients Less Than 70 Years Old With Those 70 or Older

A RETROSPECTIVE COMPUTERIZED STUDY was made of 155 patients first seen between 1930 and 1967 with early (stages A and B) prostatic carcinoma in whom endocrine therapy, either immediate or delayed, had been carried out. The patients were divided into two groups: (1) Patients less than 70 years old when the first diagnosis of carcinoma was made and (2) those 70 years old or older. The crude 10-year or longer survival rate of group 1 (66 percent) was only slightly less than the expected survival rate (71 percent) of that age group (mean age 60 years) but there was a significantly greater difference in the survival rate in the 15-year or longer (42 percent versus 54 percent) and the 20-year or longer (23 percent versus 35 percent) periods. The crude 10-year or longer survival rate of group 2 (70 years old or older) was 37 percent (expected survival, age 78, was 25 percent). The crude 15-year or longer survival rate (16 percent) and 20-year or longer survival rate (7 percent) was also better than the expected survival (7 percent 15-year and 1 percent 20-year).

Probable explanations for the crude survival